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<i>Large Coating, Printing, Aerospace and Chemical Operations Team</i>	PROCESSED BY	SMP
<b>APPLICATION PROCESSING AND CALCULATIONS</b>	REVIEWED BY	
	DATE	1//17/14

**PERMIT TO OPERATE EVALUATION  
SOLVENT STILL, DRUM CLEANING SYSTEM AND COATING LINES**

<b>Applicant's Name</b>	ARLON GRAPHICS LLC
<b>Company I.D.</b>	167066
<b>Mailing Address</b>	2811 S. HARBOR BLVD., SANTA ANA, CA 92704
<b>Equipment Address</b>	2811 S. HARBOR BLVD., SANTA ANA, CA 92704

**EQUIPMENT DESCRIPTION**

**Application No. 557375**

DE-MINIMIS TITLE V/RECLAIM PERMIT REVISION

**Application No. 557376 (Admin. Change, Previous A/N 532300, D26, D27)**

FILM COATING (PRIMER) LINE CONSISTING OF:

1. UNWIND ROLLER STAND WITH ONE 0.5 H.P. WEB GUIDE.
2. FAUSTEL, GRAVURE COATING HEAD WITH ROLLERS AND TWO 2 H.P. DRIVES. (D26)
3. COATING APPLICATION CHAMBER WITH A DOCTOR BLADE.
4. OVEN, RADIAN ENERGY SYSTEM, 5'-8" W. X 5'-4" L. X 1'-4" H., 77.5 KW INFRARED HEATER, WITH A 2 H.P. SUPPLY BLOWER AND A 2 H.P. EXHAUST BLOWER. (D27)
5. SPLICE STAND, WITH A 5 H.P. MAIN DRIVE.
6. REWIND ROLLER STAND WITH A 10 H.P. MOTOR.

**Application No. 557XXX (Admin. Change, Previous A/N 536826, D17)**

SOLVENT RECOVERY STILL, C.B. MILLS, MODEL "RED HEAD" RHS-30, 6' - 10" W. X 6' - 2" L. X 9' - 7" H., 30-GALLON CAPACITY, WITH A 30 KW ELECTRIC HEATER AND A WATER-COOLED CONDENSER.

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**Application No. 557XXX (Admin. Change, Previous A/N 536828, D16)**

DRUM CLEANER, CB MILLS, MODEL "RED HEAD" TW-300 SERIES, WITH A HOIST, A TANK COVER, HIGH-PRESSURE WASH NOZZLE ASSEMBLY, A 150 GALLON CLEAN SOLVENT TANK AND A 150-GALLON CONTAMINATED SOLVENT TANK, ONE SOLVENT RECIRCULATING PUMP 40 H. P., AND ONE 1/4 H.P. BLOWER.

**Application No. 557XXX (Admin. Change, Previous A/N 536829, D13, D2)**

PAPER/FILM COATING SYSTEM (C2):

1. UNWIND ROLLER WITH ONE 1 H.P. WEB GUIDE
2. UNWIND ROLLER WITH ONE 5 H.P. TURRET GUIDE
3. ROLLCOATER, GOWEN, MODEL CK60, KNIFE-OVER-ROLL TYPE (D13)
4. OVEN, GOWEN, MODEL BZ, 7' – 5" W. X 80' – 0" L. X 6' – 0" H., 4,500,000 BTU/HR INDIRECT NATURAL GAS FIRED, WITH ONE 90 H.P. SUPPLY FAN, ONE 10 H.P. RECIRCULATING FAN (D2)
5. PRINTING PRESS, FLEXOGRAPHIC, WOLVERINE, MODEL NO. 66-1, 66 INCH WEB WIDTH, ONE COLOR. (D25)

**Application No. 557XXX (Admin. Change, Previous A/N 536831, D3, D14, D25)**

PAPER/FILM COATING SYSTEM (C3):

1. UNWIND ROLLER WITH ONE 1 H.P. WEB GUIDE
2. UNWIND ROLLER WITH ONE 5 H.P. TURRET GUIDE
3. REVERSE ROLL COATING HEAD WITH ONE 2 H.P. DRIVE (D14)
4. LAMINATOR, WITH ONE 5 H.P. ROLL DRIVE AND ONE 3 H.P. NIP ROLL
5. TWO REWIND ROLLERS, EACH WITH 5 H.P. SPINDLE.
6. OVEN, FAUSTEL, 8'-0" W. X 100'-0" L. X 4'-0" H., 5,000,000 BTU/HR INDIRECT NATURAL GAS FIRED, WITH ONE 90 H.P. SUPPLY FAN, ONE 10 H.P. RECIRCULATING FAN, ONE 5 H.P. TENDENCY DRIVE, AND ONE 30 H.P. EXHAUST BLOWER. (D3)
7. PRINTING PRESS, FLEXOGRAPHIC, WOLVERINE, MODEL NO. 66-1, 66 INCH WEB WIDTH, ONE COLOR. (D25)

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**Application No. 557381 (Modification, Previous A/N 547409, D30, D31)**

FILM COATING LINE NO. C-4, CONSISTING OF:

1. PRIMARY DUAL ROLL UNWIND STAND WITH TWO 7.5 H.P. AND ONE 15 H.P. MOTORS (D30).
2. CARTRIDGE COATING SYSTEM WITH TWO 3 H.P. MOTORS.
3. FOUR ZONE DRYING AND COOLING SYSTEM WITH A TOTAL EXHAUST CAPACITY OF 8,000 ACFM AND A 15 H.P. EXHAUST FAN CONSISTING OF (D31):
 

ZONE 1, OVEN, 7' - 6" W. X 7' - 0" H. X 12' - 9" L., WITH A 1,300,000 BTU PER HOUR MAXON OVENPAK LE LOW NOX BURNER AND A 7.5 H.P. AIR SUPPLY FAN.

ZONE 2, OVEN, 7' - 6" W. X 7' - 0" H. X 12' - 9" L., WITH A 1,300,000 BTU PER HOUR MAXON OVENPAK LE LOW NOX BURNER AND A 7.5 H.P. AIR SUPPLY FAN.

ZONE 3, OVEN, 7' - 6" W. X 7' - 0" H. X 12' - 9" L., WITH A 1,300,000 BTU PER HOUR MAXON OVENPAK LE LOW NOX BURNER AND A 7.5 H.P. AIR SUPPLY FAN.

ZONE 4, OVEN, 7' - 6" W. X 7' - 0" H. X 12' - 9" L., WITH A 1,300,000 BTU PER HOUR MAXON OVENPAK LE LOW NOX BURNER AND A 7.5 H.P. AIR SUPPLY FAN.
4. GUIDED COOLING ROLL WITH A 5 H.P. MOTOR.
5. VARIOUS SPLICER, SLITTER, INSPECTION, REWIND/UNWIND STATIONS WITH TWO 7.5 H.P., TWO 3 H.P. AND ONE 15 H.P. MOTORS.

<b>HISTORY</b>
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Arlon Graphics, LLC submitted above permit applications to correct the equipment description of the oven for recently installed coating line (C4). The oven burner details were incorrect in the permit description. The company also applied for administrative change applications to share the facility VOC emission limit with their new facility with I.D. 174406 at Placentia, after the initiation of the proposed relocation to Placentia.

The company has decided to relocate all their current manufacturing operations in Santa Ana a new location at Placentia in the near future due to expansion of the business and new product lines. The facility recently obtained permits to construct from the District to install a coating line and a Regenerative Thermal Oxidizer (RTO) for the Placentia facility (ID 174406).

Initially the VOC emission limit will be shared between the two plants, till the whole manufacturing operation is relocated to the new Placentia location. Thus, a permit condition will be imposed on both facilities for the sharing of the existing VOC emission limit of 931 pounds per day for the Santa Ana location with the Placentia location.

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Arlon Graphics (RECLAIM/Title V) is a decorative film manufacturer operating at the Santa Ana location for a number of years. Their products are sold all over the world. The manufacturing process at the Placentia location will be same as in Santa Ana facility. The manufacturing process involves casting of a vinyl film and application of coatings, such as adhesive, ink and primer. This adhesive-backed digital printable vinyl film is used for graphics printing (number, logos, pictures, etc.) by the customers, and applied to their vehicles or any other surfaces.

The company currently has active permits to operate four coating lines, one solvent reclaim still, one solvent drum cleaning system, and two afterburners under I.D. # 167066 at their Santa Ana plant. A facility-wide VOC emission limit of 931 pounds per day has also been established for Arlon Graphics, LLC under District ID # 167066 for the Santa Ana location. Placentia location will have the same limit after the complete relocation from Santa Ana.

There will be increase in the toxic emissions and criteria pollutant emissions due to increase in the natural gas combustion in the oven for line C4. This is expected to comply with the R1401 requirements. The criteria pollutant emission increases will be within the four ton threshold limits. No VOC offsets will be required because facility has not requested any increase in the facility limit.

The emissions from the coating lines, solvent drum cleaning system and solvent still are vented to VOC control systems, which provides at least 95% overall VOC control efficiency. This complies with the current VOC BACT requirements for such equipment. The usage of RTO to control VOC emissions also provides compliance with District Rules 1128 and 1171 requirements.

The oven of the coating line (C4) is equipped with Maxon low NOx burners with a guaranteed <30 ppmv NOx emissions at 3% O<sub>2</sub>. This complies with the current NOx BACT requirements for the natural gas fired oven. A source test was performed which indicated compliance with the NOx emissions of the oven burners.

The District database shows that the operator has not received any odor nuisance or visible emission complaints from the public in the last two years at this location. The database also indicated that no Notice to Comply or the Notice of Violation was issued to this facility in the last two years at this location.

The facility is located within an industrial area. It is not located within 1000 feet from any school. The equipment criteria pollutant emission increases do not exceed emission threshold under this project. There are no carcinogenic air toxic compounds present in this operation other than the natural gas combustion. The cancer risk increase is less than 1 in a million. Hence, this project do not require a public notice. Arlon Graphics, LLC is a RECLAIM/Title V facility. This is a de-minimis RECLAIM/Title V permit revision.

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### PROCESS DESCRIPTION

Arlon Graphics manufactures decorative film for a number of years. The manufacturing process involves casting of a vinyl film and application of adhesive on the film. This adhesive-backed digital printable vinyl film is used for graphics (number, logos, pictures, etc.) by the customers, and applied to their vehicles or other surfaces. These lines are used to cast vinyl, apply adhesive, apply primer, and apply logos by printing. The coatings are dried and cured in the gas-fired ovens on the coating lines. The vinyl substrate also gets laminated with adhesive coated release liner in the coating line.

In all the coating lines, the coating enters the application chamber via various piston pumps. The substrate is pulled through the coating chambers and gets coated as they leave the chambers. The coating and liner are pulled through a knife over roll coater gap to ensure the proper thickness of the coating. The coating is applied in permanent total enclosures for 100% collection (PTE), and VOC are vented to RTO.

A drum-cleaning system including a solvent still is used at this facility, which is also vented to an air pollution control system.

### OPERATING HOURS

Average : 24 hour/day, 7 days/week, 52 weeks/year  
Maximum: 24 hour/day, 7 days/week, 52 weeks/year

### EMISSION CALCULATIONS

#### Application No. 557381 (C4 Coating Line)

The oven burner data was incorrect in the recently issued permit to construct for line C4. Only one burner of 1.35 mm Btu/hr was considered in the permit evaluation instead of four 1.3 mm Btu/hr burners (total of 5.2 mm Btu/hr).

Emission data will be adjusted for the additional combustion emissions of 3.85 mm Btu/hr. The coating related data will not change under this project. Previous emission entry for VOC will be re-entered for this application.

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### Toxic Emissions from Combustion (Coating Line Oven):

The previous application has following emission data entered for the natural gas combustion.

547409		Coating Line Oven						@
	<u>maximum</u>	<u>normal</u>						
<u>hr/dy</u>	24	2	<u>max heat input</u>	1.35E+06 (BTU/hr)				
<u>dy/wk</u>	7	7	<u>gross heating value</u>	1050 (BTU/scf)				
wk/yr	52	52						
load	100%	100%						
	Emission	MAX	AVE	MAX	30-DAY	MAX	MAX	
	<u>Factors</u>	(lb/hr)	(lb/hr)	(lb/dy)	(lb/dy)	(lb/yr)	(ton/yr)	
SO <sub>2</sub> (R1)	0.6	0.001	0.001	0.019	NA	7	0.003	
SO <sub>2</sub> (R2)	0.6	0.001	0.001	0.019	0.019	7	0.003	
NO <sub>2</sub> (R1)	38.94	0.050	0.050	1.202	NA	437	0.219	
NO <sub>2</sub> (R2)	38.94	0.050	0.050	1.202	1.202	437	0.219	
CO (R1)	77.39	0.100	0.100	2.388	NA	869	0.435	
CO (R2)	77.39	0.100	0.100	2.388	2.388	869	0.435	
TOC (R1=R2)	7	0.009	0.009	0.216	NA	79	0.039	
N <sub>2</sub> O (R1=R2)	2.2	0.003	0.003	0.068	0.068	25	0.012	
PM, PM <sub>10</sub> (R1=R2)	7.5	0.010	0.010	0.231	0.231	84	0.042	
Hexane	0.0063	8.1E-06	8.1E-06	1.9E-04	NA	7.08E-2	3.54E-5	
Ammonia	3.2	4.1E-03	4.1E-03	9.9E-02	NA	3.59E+1	1.80E-2	
ethyl benzene	0.0095	1.2E-05	1.2E-05	2.9E-04	NA	1.07E-1	5.34E-5	
acetaldehyde	0.0043	5.5E-06	5.5E-06	1.3E-04	NA	4.83E-2	2.41E-5	
acrolein	0.0027	3.5E-06	3.5E-06	8.3E-05	NA	3.03E-2	1.52E-5	
benzene	0.008	1.0E-05	1.0E-05	2.5E-04	NA	8.99E-2	4.49E-5	
formaldehyde	0.017	2.2E-05	2.2E-05	5.2E-04	NA	1.91E-1	9.55E-5	
naphthalene	0.0003	3.9E-07	3.9E-07	9.3E-06	NA	3.37E-3	1.68E-6	
PAH's	0.0001	1.3E-07	1.3E-07	3.1E-06	NA	1.12E-3	5.62E-7	
toluene	0.0366	4.7E-05	4.7E-05	1.1E-03	NA	4.11E-1	2.06E-4	
xylene	0.0272	3.5E-05	3.5E-05	8.4E-04	NA	3.06E-1	1.53E-4	
NO <sub>2</sub> @ 3% excess O <sub>2</sub> ----->>	30.00	(ppmv)		SO <sub>2</sub> @ 3% excess O <sub>2</sub> ----->>	0.33	(ppmv)		
CO @ 3% excess O <sub>2</sub> ----->>	97.93	(ppmv)		PM @ 12% CO <sub>2</sub> ----->>	5.5E-09	(grain/ft <sup>3</sup> )		

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## APPLICATION PROCESSING AND CALCULATIONS

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The correct emissions from actual natural gas combustion of 5.2 mm Btu/hr should have been as follows.

557381

## Coating Line Oven

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	<u>maximum</u>	<u>normal</u>		
<u>hr/dy</u>	24	2	<u>max heat input</u>	5.20E+06 (BTU/hr)
<u>dy/wk</u>	7	7	<u>gross heating value</u>	1050 (BTU/scf)
<u>wk/yr</u>	52	52		
<u>load</u>	100%	100%		

  

	Emission	MAX	AVE	MAX	30-DAY	MAX	MAX
	<u>Factors</u>	(lb/hr)	(lb/hr)	(lb/dy)	(lb/dy)	(lb/yr)	(ton/yr)
SO <sub>2</sub> (R1)	0.6	0.003	0.003	0.071	NA	26	0.013
SO <sub>2</sub> (R2)	0.6	0.003	0.003	0.071	0.071	26	0.013
NO <sub>2</sub> (R1)	38.94	0.193	0.193	4.628	NA	1,685	0.842
NO <sub>2</sub> (R2)	38.94	0.193	0.193	4.628	4.628	1,685	0.842
CO (R1)	77.39	0.383	0.383	9.198	NA	3,348	1.674
CO (R2)	77.39	0.383	0.383	9.198	9.198	3,348	1.674
TOC (R1=R2)	7	0.035	0.035	0.832	NA	303	0.151
N <sub>2</sub> O (R1=R2)	2.2	0.011	0.011	0.261	0.261	95	0.048
PM, PM <sub>10</sub> (R1=R2)	7.5	0.037	0.037	0.891	0.891	324	0.162
Hexane	0.0063	3.1E-05	3.1E-05	7.5E-04	NA	2.73E-1	1.36E-4
Ammonia	3.2	1.6E-02	1.6E-02	3.8E-01	NA	1.38E+2	6.92E-2
ethyl benzene	0.0095	4.7E-05	4.7E-05	1.1E-03	NA	4.11E-1	2.06E-4
acetaldehyde	0.0043	2.1E-05	2.1E-05	5.1E-04	NA	1.86E-1	9.30E-5
acrolein	0.0027	1.3E-05	1.3E-05	3.2E-04	NA	1.17E-1	5.84E-5
benzene	0.008	4.0E-05	4.0E-05	9.5E-04	NA	3.46E-1	1.73E-4
formaldehyde	0.017	8.4E-05	8.4E-05	2.0E-03	NA	7.35E-1	3.68E-4
naphthalene	0.0003	1.5E-06	1.5E-06	3.6E-05	NA	1.30E-2	6.49E-6
PAH's	0.0001	5.0E-07	5.0E-07	1.2E-05	NA	4.33E-3	2.16E-6
toluene	0.0366	1.8E-04	1.8E-04	4.4E-03	NA	1.58E+0	7.92E-4
xylene	0.0272	1.3E-04	1.3E-04	3.2E-03	NA	1.18E+0	5.88E-4

NO<sub>2</sub> @ 3% excess O<sub>2</sub>----->>> 30.00 (ppmv)SO<sub>2</sub> @ 3% excess O<sub>2</sub>----->>> 0.33 (ppmv)CO @ 3% excess O<sub>2</sub>----->>> 97.93 (ppmv)PM @ 12% CO<sub>2</sub>----->>> 5.5E-09 (grain/ft<sup>3</sup>)

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The following Table describes emission increases from the additional natural gas combustion of 3.85 mm Btu/hr.

557381

Coating Line Oven

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	<u>maximum</u>	<u>normal</u>					
<u>hr/dy</u>	24	2	<u>max heat input</u>	3.85E+06 (BTU/hr)			
<u>dy/wk</u>	7	7	<u>gross heating value</u>	1050 (BTU/scf)			
<u>wk/yr</u>	52	52					
<u>load</u>	100%	100%					

	Emission	MAX	AVE	MAX	30-DAY	MAX	MAX
	<u>Factors</u>	(lb/hr)	(lb/hr)	(lb/dy)	(lb/dy)	(lb/yr)	(ton/yr)
SO <sub>2</sub> (R1)	0.6	0.002	0.002	0.053	NA	19	0.010
SO <sub>2</sub> (R2)	0.6	0.002	0.002	0.053	0.053	19	0.010
NO <sub>2</sub> (R1)	38.94	0.143	0.143	3.427	NA	1,247	0.624
NO <sub>2</sub> (R2)	38.94	0.143	0.143	3.427	3.427	1,247	0.624
CO (R1)	77.39	0.284	0.284	6.810	NA	2,479	1.239
CO (R2)	77.39	0.284	0.284	6.810	6.810	2,479	1.239
TOC (R1=R2)	7	0.026	0.026	0.616	NA	224	0.112
N <sub>2</sub> O (R1=R2)	2.2	0.008	0.008	0.194	0.194	70	0.035
PM, PM <sub>10</sub> (R1=R2)	7.5	0.028	0.028	0.660	0.660	240	0.120
Hexane	0.0063	2.3E-05	2.3E-05	5.5E-04	NA	2.02E-1	1.01E-4
Ammonia	3.2	1.2E-02	1.2E-02	2.8E-01	NA	1.03E+2	5.13E-2
ethyl benzene	0.0095	3.5E-05	3.5E-05	8.4E-04	NA	3.04E-1	1.52E-4
acetaldehyde	0.0043	1.6E-05	1.6E-05	3.8E-04	NA	1.38E-1	6.89E-5
acrolein	0.0027	9.9E-06	9.9E-06	2.4E-04	NA	8.65E-2	4.32E-5
benzene	0.008	2.9E-05	2.9E-05	7.0E-04	NA	2.56E-1	1.28E-4
formaldehyde	0.017	6.2E-05	6.2E-05	1.5E-03	NA	5.45E-1	2.72E-4
naphthalene	0.0003	1.1E-06	1.1E-06	2.6E-05	NA	9.61E-3	4.80E-6
PAH's	0.0001	3.7E-07	3.7E-07	8.8E-06	NA	3.20E-3	1.60E-6
toluene	0.0366	1.3E-04	1.3E-04	3.2E-03	NA	1.17E+0	5.86E-4
xylene	0.0272	1.0E-04	1.0E-04	2.4E-03	NA	8.71E-1	4.36E-4

NO <sub>2</sub> @ 3% excess O <sub>2</sub> ----->>	30.00	(ppmv)	SO <sub>2</sub> @ 3% excess O <sub>2</sub> ----->>	0.33	(ppmv)
CO @ 3% excess O <sub>2</sub> ----->>	97.93	(ppmv)	PM @ 12% CO <sub>2</sub> ----->>	5.5E-09	(grain/ft <sup>3</sup> )

Ver. 1.3

A Tier 2 Risk Assessment was performed to determine the health risk from the toxic air contaminants emitted from the additional combustion of natural gas. The assessment calculated a cancer risk of 0.0416 in a million for the residential receptor and 0.0428 in a million for a commercial receptor. The assessment also calculated both acute and chronic hazard index risks and all the risks were below 1. Thus, the Tier 2 risk assessment demonstrated compliance with the Rule 1401 requirements.



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The following table describes the administrative change applications with the previous application numbers. All the emissions from the corresponding previous applications will be re-entered for these applications, except A/N 557381 to show the increases from the additional combustion emissions.

Application No.	Previous App. No.	CO Lb/hr	CO Lb/day	NO <sub>x</sub> Lb/hr	NO <sub>x</sub> Lb/day	VOC Lb/hr	VOC Lb/day	PM <sub>10</sub> Lb/hr	PM <sub>10</sub> Lb/day
557376	532300	0	0	0	0	0.04	0.64	0	0
557377	536826	0	0	0	0	0.07	1.12	0	0
557378	536828	0	0	0	0	0.01	0.16	0	0
557379	536829	0.1	2.4	.15	3.6	3.5	232	0.05	1.2
557380	536831	0.14	3.36	0.55	13.2	19.12	458.88	0.04	0.96
557381	547409	0.38	9.2	0.19	4.63	3.55	85.2	0.04	0.89

#### **RULES/REGULATION EVALUATION**

##### **□ RULE 212, PUBLIC NOTIFICATION**

##### **√ SECTION 212(c)(1):**

This section requires a public notice for all new or modified permit units that may emit air contaminants located within 1,000 feet from the outer boundary of a school. These sources are not located within 1,000 feet from the outer boundary of a school. Therefore, public notice will not be required by this section.

##### **√ SECTION 212(c)(2):**

This section requires a public notice for all new or modified facilities which have on-site emission increases exceeding any of the daily maximums as specified in subdivision (g). As shown in the following table, the emission increases from additional natural gas combustion are below the daily maximum limits specified by Rule 212(g). Therefore, public notice will not be required by this section.

<b>LB/DAY</b>	<b>CO</b>	<b>NOX</b>	<b>PM<sub>10</sub></b>	<b>ROG</b>	<b>Lead</b>	<b>SOX</b>
<b>MAX. LIMIT</b>	220	40	30	30	3	60
<b>INCREASES</b>	6.81	3.43	0.66	0.62	0	0.05

##### **√ SECTION 212(c)(3):**

A Tier 2 Risk Assessment was performed to determine the health risk from the toxic air contaminants emitted from the additional natural gas combustion from this project. The assessment calculated cancer risk increase of 0.0416 in a million for the residential receptor and 0.0428 in a million for a commercial receptor. Therefore, public notice will not be required by this section.

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▼ **SECTION 212(g):**

This section requires a public notice for all new or modified sources which undergo construction or modifications resulting an emissions increase exceeding any of the daily maximum specified in the table below. As shown in the following table, the emission increases from the additional natural gas combustion are below the daily maximum limits specified by Rule 212(g). Therefore, public notice will not be required by this section.

<b>LB/DAY</b>	<b>CO</b>	<b>NOX</b>	<b>PM<sub>10</sub></b>	<b>ROG</b>	<b>Lead</b>	<b>SOX</b>
<b>MAX. LIMIT</b>	220	40	30	30	3	60
<b>INCREASES</b>	6.81	3.43	0.66	0.62	0	0.05

▫ **RULES 401 & 402, VISIBLE EMISSIONS & NUISANCE**

SCAQMD database has no records of any visible emissions or nuisance complaints against this company at this location.

▫ **RULE 1128 PAPER, FABRIC, AND FILM COATING OPERATIONS**

▼ **SECTION (c)(2), VOC CONTENT OF COATINGS**

The applicant will be in compliance with these requirements by using air pollution control equipment with a sufficient VOC control efficiency (100% collection and 95% destruction).

▼ **SECTION (c)(6), TRANSFER EFFICIENCY**

Roller coating and dip coating application methods comply with this requirement. Also applicant will be in compliance with these requirements by using an air pollution control system with a sufficient VOC control efficiency (100% collection and 95% destruction).

▫ **RULE 1130, GRAPHIC ARTS**

▼ **SECTION (C)(1), VOC CONTENT OF INKS**

The VOC content of the flexographic ink is less than 100 grams per liter. Thus they comply with the rule requirement of less than 300 grams per liter VOC content.

▫ **RULE 1171, SOLVENT CLEANING OPERATIONS**

The applicant will be in compliance with these requirements by using an air pollution control system with a sufficient VOC control efficiency (100% collection and 95% destruction).

**REGULATION XIII**

▫ **RULE 1303(a), BEST AVAILABLE CONTROL TECHNOLOGY (BACT)**

**NO<sub>x</sub> EMISSIONS**

The film coating line (No. C-4) utilizes oven burners with less than 30 ppmv NO<sub>x</sub> at 3% oxygen level. Compliance with the requirement was achieved.

▫ **RULE 1303(b)(1), MODELING**

Modeling is not required since PM<sub>10</sub>, NO<sub>x</sub> and CO emission increases are below the Table A-1 allowable emissions.

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NO <sub>x</sub> (lbs/hr)		PM <sub>10</sub> (lbs/hr)		CO (lbs/hr)	
Allowed	Actual	Allowed	Actual	Allowed	Actual
0.47	0.19	2.8	0.04	25.9	0.38

▣ **RULE 1303 (b)(2), EMISSION OFFSETS**

Emission offsets are not required for this project as the criteria pollutant emission increases are less than 4 tons/year threshold limits. VOC emissions will be within the facility VOC emission limit.

A facility-wide VOC emission limit of 931 pounds per day has been established for this Santa Ana location. The applicant has requested this facility-wide VOC emission limit of 931 lbs/day be shared with the new Placentia location (ID 174406) until all of the existing manufacturing operations relocates to Placentia. A permit condition will be imposed on all the VOC emitting equipment at both locations to share the facility VOC emission limit.

▣ **RULE 1401, NEW SOURCE REVIEW OF TOXIC CONTAMINANTS**

As described above in the evaluation report, this equipment is expected to comply with these requirements.

▣ **RULE 2005(C)(1), BEST AVAILABLE CONTROL TECHNOLOGY (BACT)**

As discussed above, the oven complies with the current BACT requirements.

▣ **RULE 2005(c)(2), EMISSION OFFSETS**

This facility will hold sufficient NO<sub>x</sub> RTCs to offset emission increases from the equipment.

▣ **RULE 40 CFR63 SUBPART JJJJ**

Section 63.3320 requires Facilities utilizing an oxidizer to control organic HAP emissions to operate the oxidizer such that an outlet organic HAP concentration is no greater than 20 parts per million by volume (ppmv) by compound on a dry basis with 100% capture efficiency. The Facility will comply with this regulation by operating the coating operations within a PTE and have a destruction efficiency of at least 98.5%. Compliance with this regulation is expected.

**REGULATION XXX**

This facility is in the RECLAIM program. The proposed project is considered as a “de minimis significant permit revision” for non-RECLAIM pollutants to the RECLAIM/Title V permit for this facility.

Non-RECLAIM Pollutants or HAPs

Rule 3000(b)(6) defines a “significant permit revision” as any Title V permit revision where the cumulative emission increases of non-RECLAIM pollutants or HAPs from these permit revisions during the term of the permit are not greater than any of the following emission threshold levels:

Pollutant	Daily Maximum (lbs/day)
HAP	30

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VOC	30
NO <sub>x</sub> *	40
PM <sub>10</sub>	30
SO <sub>x</sub> *	60
CO	220

\* Not applicable if this is a RECLAIM pollutant

To determine if a project is considered as a “significant permit revision” for non-RECLAIM pollutants or HAPs, emission increases for non-RECLAIM pollutants or HAPs resulting from all permit revisions that are made after the issuance of the Title V renewal permit shall be accumulated and compared to the above threshold levels. This proposed project is the 3<sup>rd</sup> permit revision to the Title V renewal permit issued to this facility on February 4, 2012. The following table summarizes the cumulative emission increases resulting from all permit revisions since the Title V renewal permit was issued:

Revision	HAP	VOC	NO <sub>x</sub> *	PM10	SO <sub>x</sub>	CO
2 <sup>nd</sup> Permit Revision: Remove the equipment VOC emission limit on line C4 and limit it to the facility VOC cap.	0	0	0	0	0	0
3 <sup>rd</sup> Permit Revision: Correct oven burner data on line C4.	0	0.61	3.43	0.66	0.5	6.81
Cumulative Total	0	0.61	3.43*	0.66	0.5	6.81
Maximum Daily	30	30	40*	30	60	220

\* RECLAIM pollutant, not subject to emission accumulation requirements

Since the cumulative emission increases resulting from all permit revisions are not greater than any of the emission threshold levels, this proposed project is considered as a “de minimis significant permit revision” for non-RECLAIM pollutants or HAPs emissions.

#### RECLAIM Pollutants

Since NO<sub>x</sub> is a RECLAIM pollutant for this facility, an analysis must be made to ensure that the proposed permit revision is not considered a “significant permit revision” even though the cumulative increase in NO<sub>x</sub> emissions is less than the threshold level of 40 lbs/day. Rule 3000(b)(28)(D) defines a “significant permit revision” as any modification at a RECLAIM facility that results in an emission increase of RECLAIM pollutants over the facility’s starting Allocation plus the non-tradeable Allocations.

Section B of the initial Title V permit shows that the NO<sub>x</sub> starting Allocation plus the non-tradeable Allocation for this facility is 11,352 pounds. The total NO<sub>x</sub> emissions from permit revision at this facility is 4 lb/day X 365 = 1,460 lb/year, which is less than the starting Allocation plus the non-tradeable Allocations of 11,352 pounds. As a result, the proposed permit revision is not considered as a “significant permit revision”.

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#### **CONCLUSIONS/RECOMMENDATIONS**

The proposed project is expected to comply with all applicable District Rules and Regulations. Since the proposed project is considered as a “de minimis significant permit revision”, it is exempt from the public participation requirements under Rule 3006 (b). A proposed permit incorporating this permit revision will be submitted to EPA for a 45-day review pursuant to Rule 3003(j). If EPA does not raise any objections within the review period and upon completion of the Rule 212 public notice period, a revised Title V permit will be issued to this facility.